AMENDMENTS TO THE ABSTRACT:

Please replace the abstract with the following amended abstract:

Systems and methods for processing images. Processing an initial first color data of the image to obtain reconstructed first color data. A transform representation of the initial first color data for each of a plurality of blocks of the image is computed. Each computed transform representation comprises a plurality of transform coefficients. The transform coefficients in each block are thresholded and scaled. The thresholded and scaled transform coefficients in each block are inverted to determine a reconstructed first color value for a designated pixel in each block. Spatially local maps are determined between at least a portion of the initial first color data and at least corresponding portions of each of initial second and third color data of the image. Reconstructed second and third color values are estimated for the designated pixel in each block from selected reconstructed first color values using the spatially local maps.~~A fast technique utilizes overcomplete DCT representations and performs de-blocking, de-noising and de-blurring by thresholding and transforming the transform coefficients to process images obtained from inexpensive sensors/cameras with low-quality compressed image output. A color balance algorithm is used to compensate for hue shifts. Quality differences between color channels and inter-channel correlations are exploited to significantly reduce computational requirements and yield a high performance technique for processing such images before printing.~~